



US Army Corps  
of Engineers

Rock Island District

# PUBLIC NOTICE

Applicant: Mr. William U. Determan

Date: January 23, 2004

Expires: February 21, 2004

CEMVR-OD-P-432910-1

Section: 404

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## Joint Public Notice US Army Corps of Engineers Iowa Department of Natural Resources

1. Applicant. Mr. William U. Determan, 2188 - 250<sup>th</sup> Street, Early, Iowa 50535.
2. Project Location. Section 16 (Wetland Conversion Site) and Section 23 (Wetland Mitigation Site), Township 88 North, Range 37 West, near Early, Sac County, Iowa.
3. Project Description. The applicant proposes to tile and regrade a wet grass waterway and provide compensatory mitigation. The purpose of the project is to provide farm equipment access between agricultural fields.

a. Wetland Conversion Site. The site is a wet grass waterway that separates two agricultural fields. According to the USGS topographic map, this waterway is part of a small ephemeral stream which outlets into the Boyer River. An instrument survey and a certified wetland determination were performed onsite by the USDA Natural Resources Conservation Service (NRCS). The NRCS determined that 2.3 acres is wetland. The wetland is contiguous to the ephemeral stream and is therefore jurisdictional. The wetland would be classified as Palustrine, Emergent (PEM). Due to channel erosion, sedimentation, and aggressive growth of the species Reed Canarygrass (*Phalaris Arundinacea*), the wetland habitat is severely degraded and low value. Sediment from upland erosion has accumulated in the waterway. The accumulated sediments and Reed Canarygrass retain wetness for increasingly prolonged periods of time. Rainfall runoff has cut multiple channels and micro-channels through the Reed Canarygrass. Some cuts are incised 1.5 to 2.0 feet deep. At the west (downstream) end of the wetland, the channel is incised 4 feet deep. This has resulted in the waterway being too wet and too rough to cross with farm equipment. This forces the farm operator to move equipment between the two fields by way of U.S. Highway 20/71, which is a heavily traveled road. This presents a traffic safety hazard. The wet waterway will be tiled, excavated, and graded, in accordance with NRCS design to provide a crossable grassed waterway. At the upstream end, the waterway will be 140 feet wide with a 1.9-foot center depth. The slope ratio is 38 (horizontal) to 1 (vertical). In the center, the waterway will be 136 feet wide with a 2.0-foot center depth. The slope ratio is 34(h) to 1(v). At the downstream end, the waterway will be 178 feet wide with a 2.8-foot center depth. The slope ratio is 23(h) to 1(v) on the south side and 40(h) to 1(v) on the north side. Subsurface drainage tile will be installed on both sides of the waterway from its outlet at the Boyer River to the highway right-of-way fence. The waterway will be seeded to permanent vegetative cover in accordance with NRCS specifications. The new waterway will encompass the entire wetland area. There will be no gain in cropland acres with this project. The total wetland impact is 2.3 acres.

b. Wetland Buffer Strips (Mitigation Site). To mitigate for the wetland impacts, 7.9 acres of grass buffer strips will be established along the perimeter of an existing wetland on another farm. This farm is also owned by the family. The wetland is Palustrine, Emergent (PEM) in bottomland adjacent to Indian Creek and is 13.8 acres in size. The wetland is bordered on two sides by cropland. Pasture borders the south side of the wetland. The upland cropland ranges in slopes from 2 to 14% with some slopes as steep as 18% to 25%. Rainfall runoff flows from the cropland through this wetland. The wetland is being degraded by siltation from cropland erosion. Four

sets of grass buffer strips will be established in accordance with NRCS specifications. The grass buffer strips will slow runoff and filter sediments and chemicals from the runoff before entering the wetland. The buffer strips will

be permanently established to an approximate width of 120 feet. This will provide a mitigation ratio of 3.43 to 1. The grass buffers will be on bottomland and foot-slopes. It is anticipated that a portion of the grass buffers will establish wetland conditions.

c. Additional Wildlife Habitat Enhancement. In addition, a mixture of native prairie grasses will be established on the 16.0-acre field south of the wetland. This field was previously used as permanent pasture. The vegetation is dominantly brome grass. Roundup will be sprayed over the existing vegetation to 'burn down' the growth. Roundup is a contact herbicide labeled for this use. This herbicide is not residual and will not runoff into the wetland. The native prairie grass mixture will be no-till drilled into the vegetative residue.

d. Alternatives. Alternatives were considered. One alternative was to perform maintenance excavation of the wet waterway to remove accumulated sediments in accordance with the Excavation Rule. However, the waterway is too wide and too wet to perform maintenance excavation without causing a more-than-minimal discharge. Another alternative would involve installing subsurface drainage tile from the Boyer River to the highway right-of-way fence sufficient distance from the wetland to avoid lateral drainage impacts. The NRCS would determine the required distance between the wetland fringe and the tile. The tile would pick up drainage from cropland east of the highway and from the adjoining crop fields. Rock would be placed across the waterway for an equipment crossing. This alternative was not chosen because it does not address the wetness, siltation, and erosions problems with the wet waterway. The waterway crossing would require high maintenance.

#### 4. Agency Review and Where to Reply.

a. Department of the Army, Corps of Engineers. The Department of the Army application is being processed under the provisions of Section 404 of the Clean Water Act (33 U.S.C. 1344).

##### b. State of Iowa

(1) The project plans have been submitted to the Iowa Department of Natural Resources (IDNR) for state certification of the proposed work in accordance with Section 401 of the Clean Water Act. The certification, if issued, will express the Department's opinion that the proposed activity will comply with Iowa's water quality standards (Chapter 61 IAC). Written comments concerning possible impacts to waters of Iowa should be addressed to: Iowa Department of Natural Resources, 900 East Grand Avenue, Des Moines, Iowa 50319. A copy of the comments should be provided to the Corps of Engineers office (see paragraph 11. of this public notice for address).

(2) The applicant has also applied for authorization of work in the floodplain pursuant to Chapter 455B of the Iowa Code and other applicable state permits. The drainage area above the project sites is below the IDNR's regulatory threshold of 10 square miles. The IDNR have determined that a Flood Plain Development Permit is not required and that a Sovereign Lands Construction Permit is also not required.

5. Historical/Archaeological. The Corps consulted with the State of Iowa geographic information systems (GIS) archeological site and survey databases as maintained by the Office of the State Archaeologist of Iowa and the State Historical Society of Iowa and current as of August 2003. No archaeological surveys or sites are located in the permit area. The Corps has determined that no historic properties are affected by issuance of this permit based upon the fact that "the nature, scope, and magnitude of the work, and/or structures to be permitted are such that there is little likelihood that a historic property exists or may be affected" (33 CFR Part 325, Appendix C.3.b).

6. Endangered Species. District staff have performed a preliminary review of this application for the potential impact on threatened or endangered species pursuant to Section 7 of the Endangered Species Act as amended. Sac County, Iowa, is listed within the current distribution area of the Bald Eagle (*Haliaeetus leucocephalus*) and the Topeka shiner (*Notropis topeka*) (North Raccoon River watershed). The Wetland Conversion Site contains no habitat suitable for the Bald Eagle and is not within the range of the Topeka shiner. The Wetland Mitigation Site is adjacent to an existing wetland system immediately upstream of Indian Creek in the North Raccoon River watershed. The Federally listed endangered species Topeka shiner (*Notropis topeka*) is known to occupy small streams and off-channel areas in the North Raccoon River watershed. The mitigation work will involve establishment of grass buffer strips along the perimeter of the existing wetland. No work will occur in the stream.

Therefore, the proposed mitigation will have no effect on the species or critical habitat of the species. Based upon the information provided and available at this time, our preliminary determination is that the proposed activities would have no effect on federally-listed endangered or threatened species or critical habitat. While no consultation has been initiated with the United States Fish and Wildlife Service (FWS) at this time, we are further coordinating this application with the FWS and the respective resource agencies through this public notice. Accordingly, our preliminary determination is subject to change should further information become available.

7. Dredge/Fill Material Guidelines. The evaluation of the impact of the proposed activity on the public interest will also include application of the guidelines promulgated by the Administrator of the United States Environmental Protection Agency under authority of Section 404(b) of the Clean Water Act (40 CFR Part 230).

8. Public Interest Review. The decision whether to issue the Corps permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit, which reasonably may be expected to accrue from the proposal, must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food production, and in general, the needs and welfare of the people.

9. Who Should Reply. The Corps of Engineers is soliciting comments from the public; Federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity. These statements should be submitted on or before the expiration date specified at the top of page 1. These statements should bear upon the adequacy of plans and suitability of locations and should, if appropriate, suggest any changes considered desirable.

10. Public Hearing Requests. Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for public hearings shall state, with particularity, the reasons for holding a public hearing. A request may be denied if substantive reasons for holding a hearing are not provided.

11. Reply to the Corps. Comments concerning the Corps permit should be addressed to the District Engineer, US Army Corps of Engineers, Rock Island District, ATTN: OD-P, Clock Tower Building - Post Office Box 2004, Rock Island, Illinois 61204-2004. **Mr. Marlyn W. Schafer (309/794-5377)** may be contacted for additional information (email: [marlyn.schafer@usace.army.mil](mailto:marlyn.schafer@usace.army.mil)).

*Original Signed By*

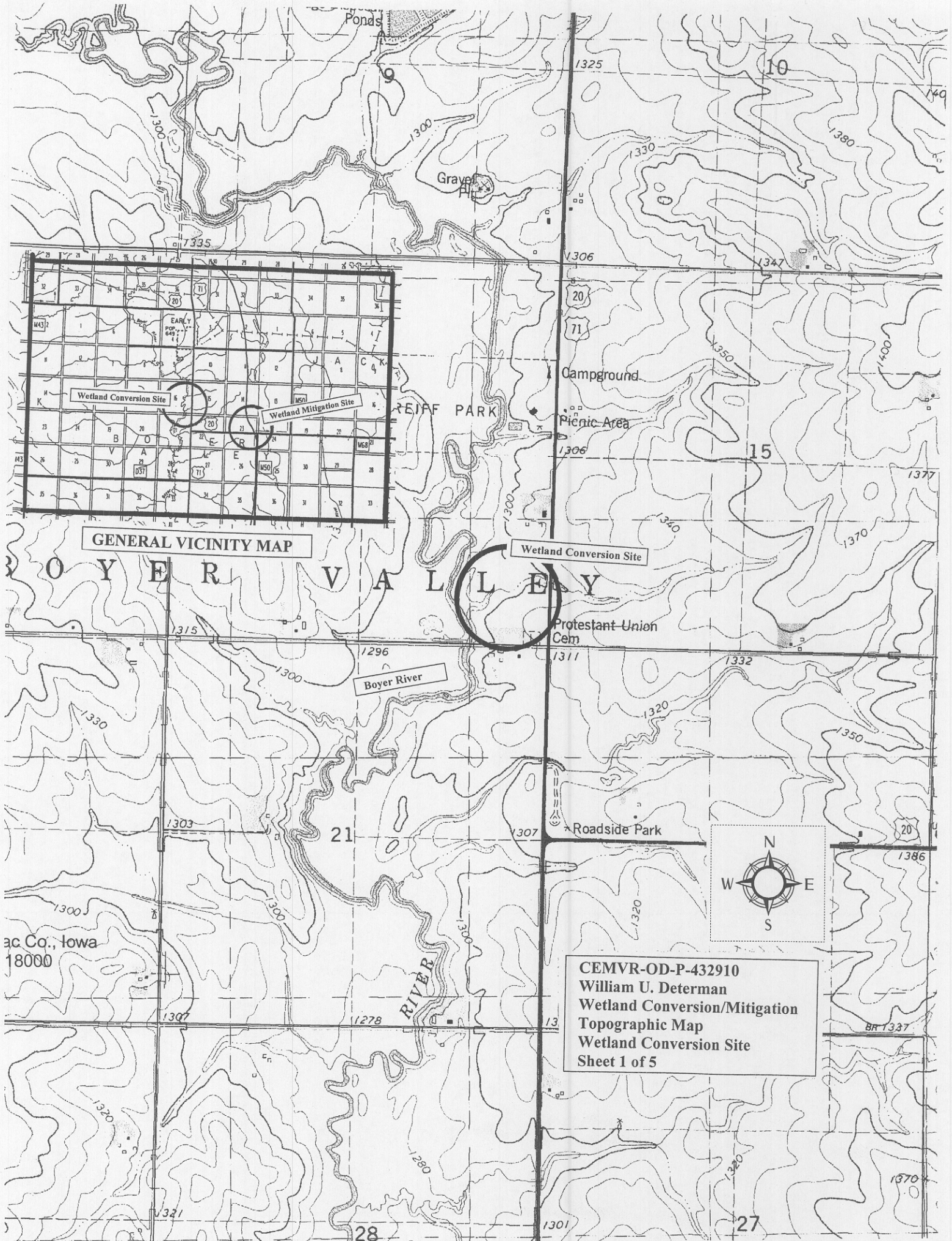
Attach  
Plan

Marlyn W. Schafer  
Project Manager  
Regulatory Branch

REQUEST TO POSTMASTERS: Please post this notice conspicuously and continuously until the expiration date specified at the top of page 1.

NOTICE TO EDITORS: This notice is provided as background information for your use in formatting news stories. This notice is not a contract for classified display advertising.







# CONSERVATION PLAN MAP LEGEND

(V)	Field Cropped 1981-1985	Grassed Waterway	<u>Planned</u>	<u>Applied</u>
(X)	Potential Swampbuster or Sodbuster Area	Field Border	---	W..
(HEL)	Highly Erodible Land	Field Boundary	---	---
(NHEL)	Non-Highly Erodible Land	Terrace	---	---
(W)	Wetland	Water Control Basin	---	---
(CW)	Converted Wetland	Critical Area Planting	---	---
(PC and NW)	Prior Converted and/or Non-Wetland	Filter Strips	---	---
(UNK)	Field with unknown field number	Windbreak- shelter belt	---	---
(NI)	Area Not Inventoried for wetlands	Riparian Buffer	---	---

All acreages are approximate.



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William U. Determan  
Wetland Conversion/Mitigation  
Aerial Photo  
Wetland Conversion Site  
Sheet 2 of 5

Boyer Valley

Boyer River

Wetland Conversion Site

NOT TO SCALE (1990 FLIGHT) SAC COUNTY -CROP YEAR \_\_\_\_\_

I-5

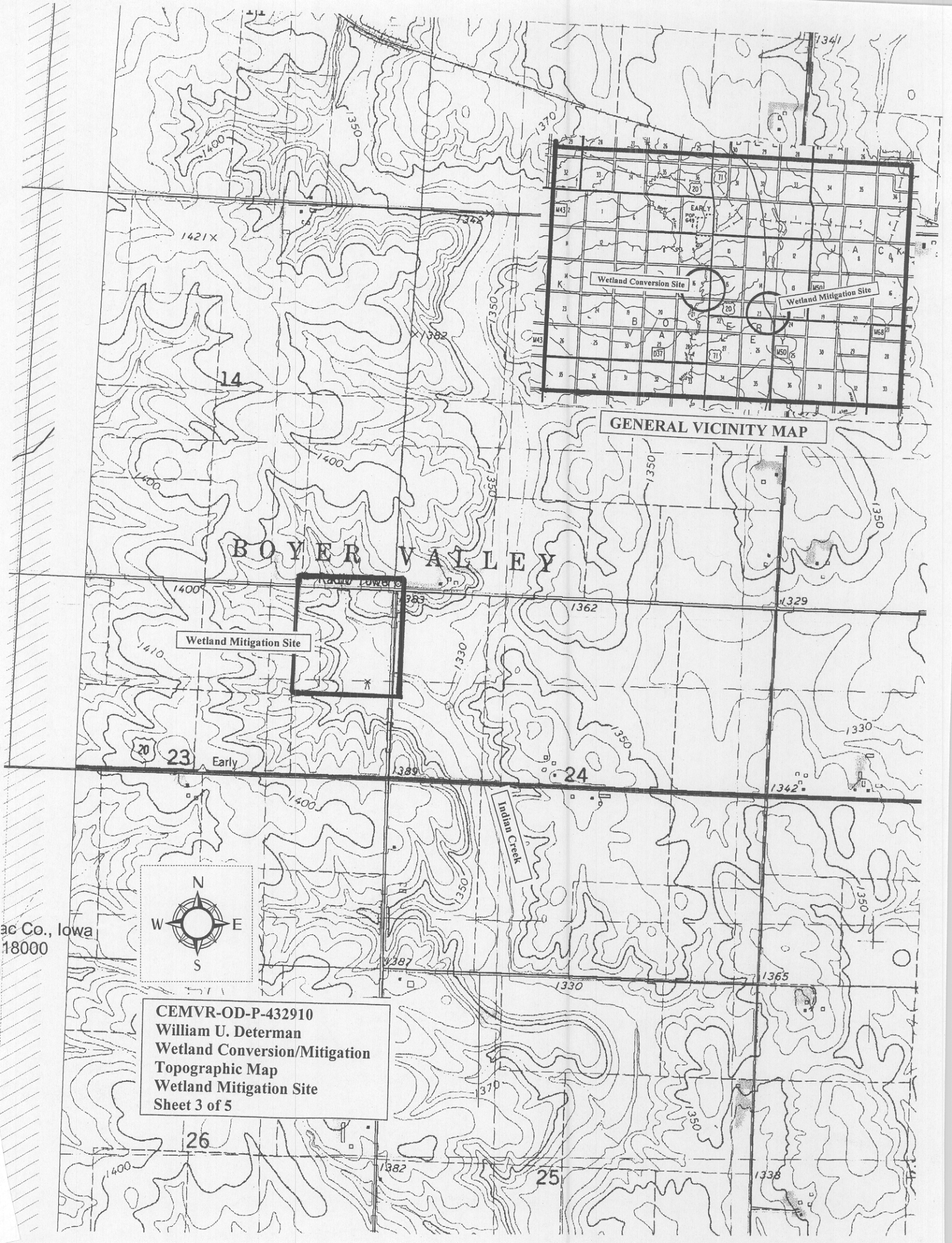
" Certified "

11-28-01

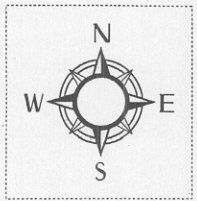
N  
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37W  
86N





ac Co., Iowa  
18000



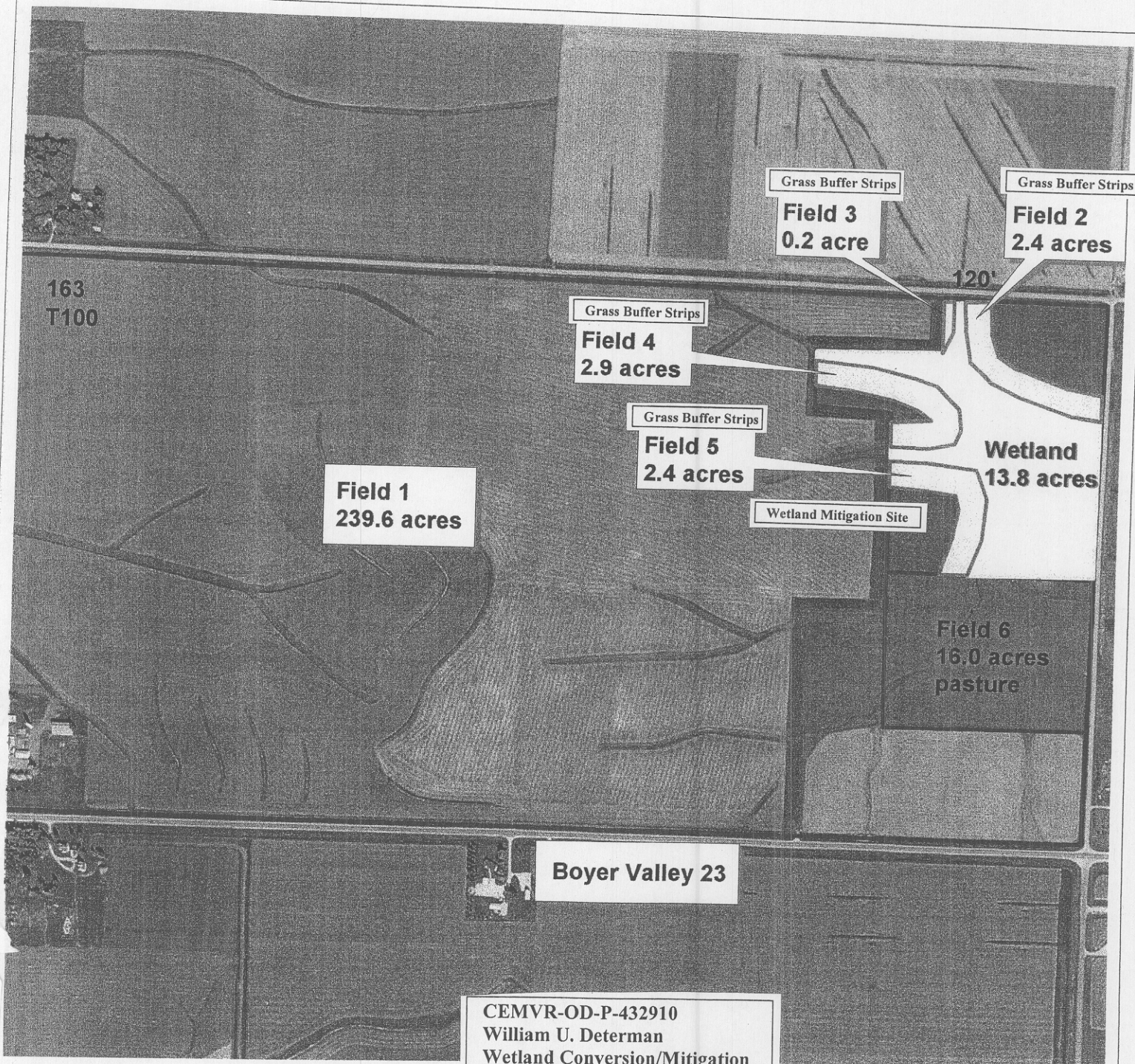
CEMVR-OD-P-432910  
William U. Determan  
Wetland Conversion/Mitigation  
Topographic Map  
Wetland Mitigation Site  
Sheet 3 of 5



# Wetland Buffer

Sac County  
NRCS  
KB

Date: 10/14/2003



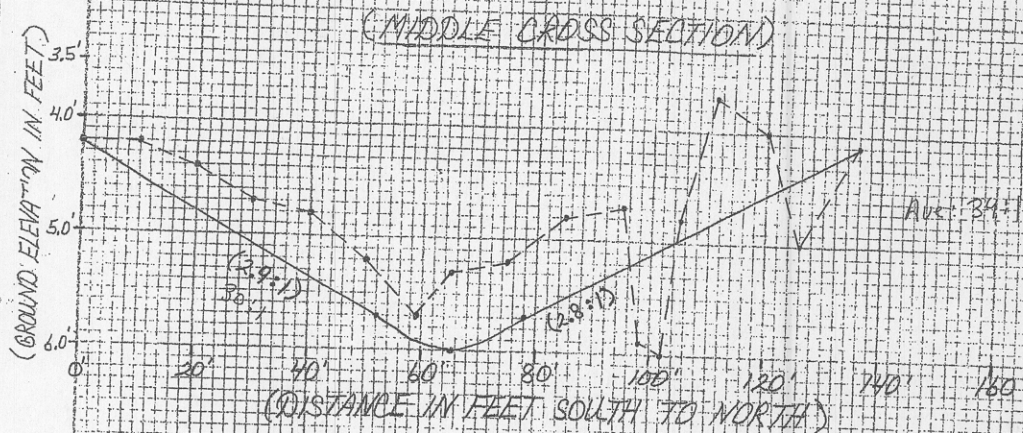
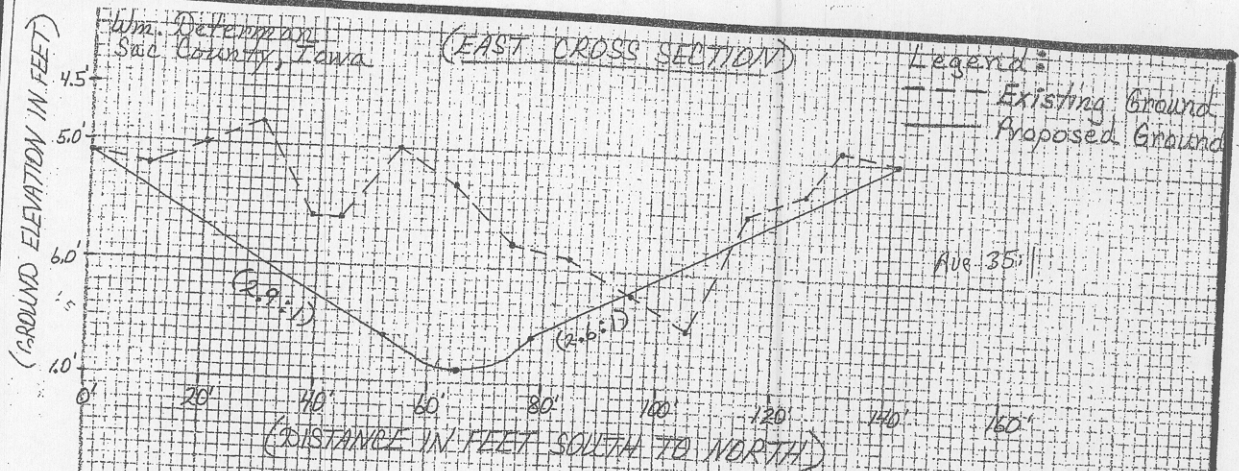
## Legend

- CP-30 Grass Buffer Strips
- Wetland
- Pasture
- Field Boundary

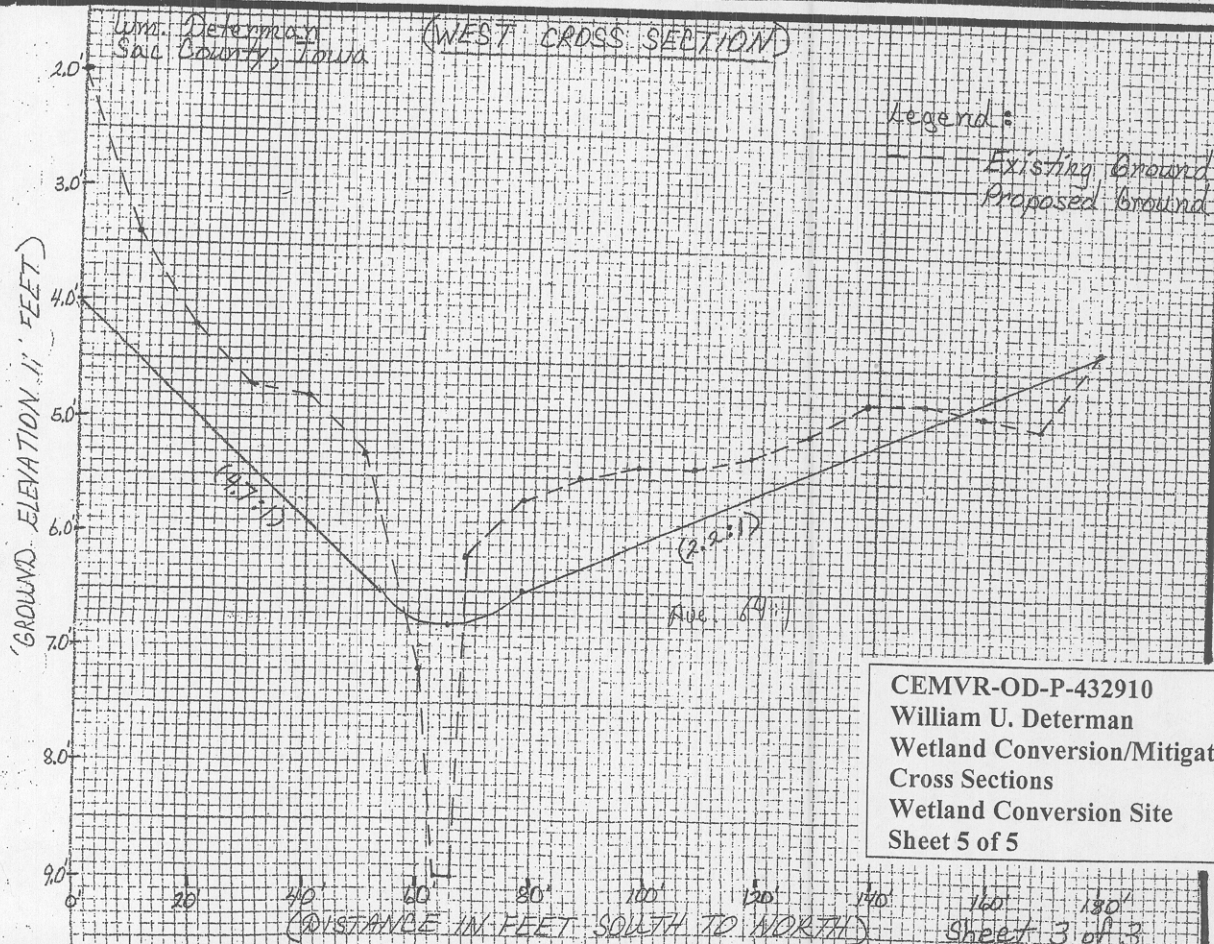
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Sheet 2 of 3



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William U. Determan  
Wetland Conversion/Mitigation  
Cross Sections  
Wetland Conversion Site  
Sheet 5 of 5

Sheet 3 of 3